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## ALOES

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ELSEWHERE I have referred to the early conception of trees and plants as animate, and to the belief that divine life or protection might be transmitted and an offender purified by eating the leaves, bark, gum or wood, or by breathing the smoke of their burning.<sup>1</sup> Notable among products valued for purposes of purification were the lemon grass, senna, myrrh, balsam, and frankincense. The present inquiry has to do with the aloe and the several products, diverse in nature and origin, to which that name has been applied.

Frazer tells of the procedure of a British East African tribe to escape the impurity of bloodshed. For the man-slayer was everywhere considered unclean, and his impurity extended to his tribe. This uncleanness lasted for four days, during which he might not go home and must remain alone eating only specified food. At the end of the fourth day he must purify himself by taking a strong purge made from the leaves of the *segetet* tree, and by drinking goat's milk mixed with blood.<sup>2</sup> In another East African tribe the sorcerer expels the sin by a ceremony, of which the principal rite is an emetic, the sin being conceived in both cases as a sort of morbid substance to be expelled, confession and absolution being, as Frazer observes, a purely physical process of relieving the sufferer of a burden which sits heavy on his stomach rather than on his conscience.

So Robertson Smith remarks that redemption, substitution, purification, atoning blood, and garment of righteousness

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<sup>1</sup> *JASOS* 40, Part IV, 260—270.

<sup>2</sup> *Taboo and the Perils of the Soul*, 175, 214.

are all terms which in some sense go back to ancient ritual. The fundamental idea of ancient sacrifice is sacramental; communion and all atoning rites are ultimately to be regarded as owing their efficacy to a communication of divine life to the worshipers.<sup>3</sup> In primitive ritual this conception is grasped in a purely physical and mechanical shape, as indeed in primitive life all spiritual and ethical ideas are still wrapped up in the husk of material embodiment. His conclusion was that a ritual system must always remain materialistic, even if its materialism is disguised under the cloak of mysticism. But it may be questioned whether

Purge me with hyssop and I shall be clean,

Wash me and I shall be whiter than snow<sup>4</sup>

may not still have a more direct appeal and significance than  
I have blotted out as a cloud thy transgressions,  
And as a mist thy sins.<sup>5</sup>

Perfumes played a similar part, a sweet savor being regarded not only as agreeable to deity, but as proceeding from the divine being animating the tree. Especially among the Semites was perfume, as Pliny remarked,<sup>6</sup> a very holy thing, which Herodotus<sup>7</sup> tells us they used in purification; and clothing worn on sacred or festal occasions was perfumed.<sup>8</sup> In many cases the gums or resins used as medicine would, when burned, give forth a fragrant incense; and this fact may explain the looseness in application of some of their names. Among these is the medicinal aloe, the sacredness of which as a means and sign of purification is indicated to this day by the fact that the Muhammadans regard it as a symbolic plant, and that especially in Egypt those returning from a pilgrimage to Mecca hang it over their street doors as token that they have performed the journey. Curiously the same name has been applied to an Eastern incense in high favor among the Chinese, and to another incense, perhaps not the same, used by the

<sup>3</sup> *Religion of the Semites*, 439.

<sup>4</sup> Ps. 51.7.

<sup>5</sup> Isai. 44.22.

<sup>6</sup> H. N. 12.54.

<sup>7</sup> I 198.

<sup>8</sup> Gen. 27.15, 27.

Parsees of India, and variously called aloe wood, *gharu* wood, eagle wood, *calambac*, and by the Chinese, 'sinking incense' (referring to its very high specific gravity), and in India *agar* or *agur*, referred to Sanskrit *a* + *guru*, not heavy—an obvious absurdity unless we allow for another strange grouping of such substances according to aroma rather than appearance, whereby aloe wood and ambergris have been sometimes associated. The subject is important, not solely to the pharmacologist, for it raises questions of early commerce as to which there has been much misunderstanding.

In the Amarna tablets Hommel<sup>9</sup> called attention to a substance, *aigalluhu*, strongly suggestive of the Greek *agalochon*, the name now applied to the incense aloe. In the Hebrew Scriptures are four references which have been a stumbling block to the translators. In the story of Balaam in Numbers is the line 'as *ahalim* planted of the Lord' (24:6). In Proverbs (7:17), 'I have perfumed my bed with myrrh, *ahalim* and cinnamon'. In Psalms (45:9), 'myrrh, *ahaloth* and cassia are all thy garments'. And in the Song of Songs (4:14), 'all trees of frankincense, myrrh and *ahaloth* with all the chief spices'. The last two are passages suggesting the festivals at a royal wedding, or state ritual of some sort. In most modern versions all four are translated 'aloes', and so recent a lexicographer as Loew<sup>10</sup> asserts as a matter beyond question that all four are aloe wood and holds that they are identical with the *almug* (I Kings 10:11-12)—an identification as to which I feel wholly skeptical. *Almug* or *algum*, while identified by some with *agaru* or *laghu*, so strongly suggests an Arabic origin that one need hardly go farther than *al-muğra-(t)*<sup>11</sup>, a South Arabian name for myrrh or frankincense; while the analogy of the Egyptian 18th Dynasty temples, with their balustrades set about with frankincense trees brought from Punt, strongly suggests that these trees of the Ophir voyages were incense trees also—a supposition strengthened by the application of the same word to a tree of Lebanon, probably

<sup>9</sup> *Expository Times*, 9. 525. Winckler left it unexplained in his Index.

<sup>10</sup> *Aramäische Pflanzennamen*, 295.

<sup>11</sup> Bent, *Southern Arabia*, 446: cf. μοκρότον, *Periplus*, 10.

the cedar,<sup>12</sup> valued not only as a building timber, but on account of its aromatic wood used in medicine and ceremonial. For *ahalim* or *ahaloth* one's first impulse is again to inquire in South Arabia, the source of so many aromatics, where Bent reports *hal* as a word used in Socotra for perfume generally;<sup>13</sup> but I am rather inclined to follow the thought of Cheyne and Barton that the word *ahalim* is corrupt, and that it was originally *ē(i)lim*,<sup>14</sup> terebinth, the difference in old Hebrew script between the *h* and the *i* being no more than the shifting of a single stroke.<sup>15</sup> This is supported by the Greek text which assumes *ohalim* and renders *skēnai* 'tents', being followed by the Latin Vulgate, *tabernaculi*: that is, at a time when the Eastern sea trade was admittedly active and aloe wood might have been imported, the best scholarship knew nothing of it, and the assumption of the Indo-Chinese wood did not find its way into the versions until after the Reformation, or after the Portuguese conquests in the East.

As for the two bridal songs, in one the LXX has *staktē* which could mean any fragrant gum, and in the other *aloth* which might be the Arabic *al'ud*, i. e. any fragrant wood: but of the terebinth more anon. It may be well now to recall the nature of these diverse products.

The medicinal aloe is the product of a plant, *Aloe Perryi*, of the lily family (similar in appearance and longevity to the century plant), which grows on the chalky plateau of Socotra and in various districts of South Arabia and Somaliland. The Ptolemies planted colonies in Socotra to stimulate its cultivation. The gatherer punches a little hole in the leaf and inserts a stick, on which the juice exudes. The first product is a watery sap; the second a thicker gum; and the third after six weeks or

<sup>12</sup> 2 Chron. 27. Cf. Cheyne, *Expos. T.* 9:470–473.

<sup>13</sup> *Op. cit.* 448.

<sup>14</sup> *The Jewish Encyclopaedia*, sub verbo 'Aloe'. Hommel (*Expos. T.* 9:526) suggests Babylonian *uhulu*, a vegetable substance often named along with *tabtu*, incense (later also 'salt'; and in modern times al-kali), and connects its ideogram through *ildig*, with *vildig* and *bdolah*, rendered bdellium. Delitzsch (*Paradies* 104) cites *ēlammāku* as one of the woods used by Sennacherib in building his palace, which Meissner classifies as cypress.

<sup>15</sup> But the writer of the Epistle to the Hebrews (8:2) quotes from the Septuagint version: 'the true tabernacle which the Lord pitched'.

more of bleeding, a dark hard resinous substance which is the most valuable. But this is not the most productive method of treatment. According to Bent,<sup>16</sup> the aloe gatherers dig a hole in the ground and line it with skin; then they pile leaves, points outward, all around until the pressure makes the juice exude. When it has dried for about six weeks it is nearly hard and is ready for the market, being shipped from time immemorial to the ports of western India, whence it is redistributed. The Socotrans call it *tayif* but the Arabs *sabr* or *sibar* which has passed into European languages: Spanish *acibar* and Portuguese *azevre*; but this word *sabr* the Arabs use also for myrrh, and the two products are not dissimilar, both being dark and of bitter taste. The root meaning seems to be 'to tie up', or in the second stem 'to heap up', and reminds one forcibly of that passage in the Periplus<sup>17</sup> describing the gathering of gums in South Arabia, in which it is said that the gum 'lies in heaps all over the country, open and unguarded, for neither openly nor by stealth can it be loaded on ship without the King's permission'. And a striking feature of the Deir-el-Bahari reliefs are these same heaps of gum which the workmen shovel into bags to be carried on board ship.<sup>18</sup> The association of myrrh and aloes appears in the Song of Songs,<sup>19</sup> which has another curious expression, 'thy lips are as lilies dropping with flowing myrrh'<sup>20</sup>. Both products are covered by the same trade name *sabr*,<sup>21</sup> and the aloe is the product of a lily. The same association appears in John 19 39.

The word 'aloe' seems to be derived from an Arabic root, *lawaya*, to bend or twist, and could refer to any product obtained by bending or doubling back a growing branch, or otherwise injuring it whereby an excrescence would be produced charged with accumulated and hardened sap. It could also refer to diseased growths produced by bark-splitting, insect

<sup>16</sup> *Op. cit.*, 381.

<sup>17</sup> Periplus, 32.

<sup>18</sup> Cf. Naville's illustration in *Deir-el-Bahari*, Egypt Exploration Fund.

<sup>19</sup> 4 14.

<sup>20</sup> 5 13.

<sup>21</sup> Cf. the *Sgobr* of Marco Polo.

stings or bacteriological action. It seems quite possible that it included the bent galls which are so characteristic of the *Pistacia* varieties that produce gum mastic and gum terebinth, also growths on varieties of the cedar and juniper, more specifically alluded to under the term 'thyine wood'. It is not impossible that it included the balsams. Dr. J. B. Nies (*Ur Dynasty Tablets*, 152, 169) gives a cuneiform sign *li* which he connects with *gûb*, cedar, cypress or juniper, and reads the temple name *E-bil-li*, as 'house of cedar fire'. He thinks that *li* and *šim* were juniper berries used as incense. I am inclined to think that resinous growths, or the resin itself, may also have been included. Dioscorides says that the resin of terebinth was exported from Arabia Petraea, and that it was produced in Judaea, Syria, Cyprus, Libya and the Cyclades.<sup>22</sup> An inscription of Sargon, the Assyrian, in 715 B. C., tells how he received from Egypt, Syria, Arabia, Sabaea, the sea-coast and the desert, precious stones, ivory, *ušu* wood, spices of all kinds, horses and camels; and Hirth would identify this *ušu* with the *su-ho-yu* of the Chinese Annals, which he thinks was storax.<sup>23</sup> This storax was a concoction of numerous aromatics, having as its basis the sap of the Syrian sweet gum, as to which the Chinese recorded that it was 'not a natural product, but made by mixing and boiling the juices of various fragrant trees; the natives thus make a balsam and sell the dregs to the traders of other countries. It goes through many hands before reaching China, and when arriving there is not so very fragrant'. Subsequently a sweeter storax from the Java rose-mallow, a near cousin of the sweet gum, won a place of favor in the Chinese market, but never drove out the Arabian product, which Hirth tells us still reaches the ports of China in vessels from Bombay, transshipped from ports of the Persian Gulf or Gulf of Aden. A similar instance is the frankincense, for which a substitute is the benzoin, a corrupt form of *luban jawī*, or Sumatra incense. The 'ointment of spikenard, very precious', mentioned in the Gospels, contained

<sup>22</sup> In passing, I wish to testify to the thoroughness of Sprengel's *Commentary on Dioscorides*. Written a century ago, it still outranks most of its successors.

<sup>23</sup> *China and the Roman Orient*, 266; cf. Delitzsch, *Paradies* 285.

perhaps very little either of spikenard or the better-known lemon-grass nard, which we call citronella; and in Islamic times *nadd* meant something altogether different. The *nadd* for the special use of the caliphs was composed of ambergris, musk, aloes and camphor, and that prepared for perfuming the Ka'ba on Fridays and the sacred rock of the temple at Jerusalem was made of pure Tibetan musk and Shahr ambergris with no aloes or camphor.<sup>24</sup>

So most of these aromatics reached the market after dilution or adulteration. The Arab, Jaubari, gives a recipe for making aloe wood. He directs that olive wood be steeped in the juice of grapes set on the fire and covered with rose water, into which chips of true aloe wood are placed. Then simmer and dry in the shade and, he says, you get an unmatched aloe. 'Sir John Mandeville' makes the same complaint of balm, for, says he, men sell a gum that they call turpentine instead of balm, and they put thereto a little balm to give good odor, and some put wax in oil of the wood of balm and say that it is balm, for so the Saracens counterfeit by subtlety of craft for to deceive the Christian men';<sup>25</sup> whereby we learn that Poe's mournful lines were literally true:

'Is there—is there balm in Gilead?—tell me—tell me, I implore!  
Quoth the raven—"Nevermore"'

The Persian Empire for the first time brought the coasts of India and the Levant within the same commercial system, and the Zoroastrian ritual made of fire and incense perhaps a more general use than any previous cult. That the aromatics of Semitic lands were drawn upon is fully known, and at this time we may infer the first systematic use of aromatics from India, including the *gharu*, eagle or aloe wood, produced to some extent in India proper, but more abundantly and in higher quality in Indo-China and the Archipelago. This substance, which seems to be that described by Dioscorides under the name *agallochon*,<sup>26</sup> belongs to an order of which

<sup>24</sup> Cf. Nuwairi, quoting Tamimi. Most of the Arabic citations in this paper are from Ferrand's *Textes Arabes Persans et Turks relatifs à l'Extrême Orient*. The classical references are conveniently assembled in Coedès, *Textes d'auteurs grecs et latins relatifs à l'Extrême Orient*.

<sup>25</sup> *Travels*, Chap. 7.

<sup>26</sup> *Aquilaria Agallocha*, order *Thymeliaceae*.

many varieties have sweet sap useful in perfumery, but in its natural state the fragrance is insignificant. When the tree is injured or in a diseased condition, its sap collects in dark, hardened masses in the trunk and branches, the resin being somewhat similar in appearance to that of the Socotran aloe, but of much finer fragrance and of very high specific gravity. Medicinally it is useful, not as a purge, but as a febrifuge. To gather the resin, whole trees may be cut down without obtaining anything, while others will be found full of resin pockets, of which no outward sign exists. The tree is cut down and allowed to decay for a few months in the tropical jungle, when little but the heavy resin remains; or to hasten the operation the branches or the trunk itself may be cut into smaller sections and piled together in a pit. Edrisi says that the roots are dug, then the top taken off and the hard wood scraped until frayed, and then again scraped with glass and put in bags of coarse cloth. Yākūt says that the aloe must be hard and heavy: if the cuttings do not sink in the water it is not choice wood. If they sink, it is pure aloe wood—there is none better. The Chinese Chau Ju-Kua calls it *ch'ön hsiang*, 'sinking incense' and observes that the hard wood and joints which are hard and black and sink in water are so called, while those which float on the surface are of less value and are called 'chicken bone perfume'.<sup>27</sup> Marco Polo tells of its use by conjurers in Cambodia. If a man falls sick conjurers dance until one falls in a trance and says what harm the sick man has done to some other spirit. Then the friends bring the things specified for sacrifice and the conjurers come and take flesh broth and drink and aloes wood and a great number of lights and go about scattering the broth and the meat and drink, and when all that the spirit has commanded has been done according to ceremony, then it shall be announced that the man is pardoned and is speedily cured and presently the sick man gets sound and well'.<sup>28</sup>

As to the use of these resins in purification, Plutarch says

<sup>27</sup> Hirth, *Chau Ju-Kua*, 204—208.

<sup>28</sup> II. 50. The Cordier-Yule edition has a useful analysis of Marco's classification of the aloe.

that it was 'not considered fitting to worship with sickly bodies or souls'. As an incense to purify the air at dawn they burned resin, and at noon myrrh because its hot nature successfully dissolved and dissipated the turbid element in the air drawn up from the ground by the force of the sun. These impurities were better driven away if woods of a dry nature were burned, such as cypress, juniper and pine. Aristotle asserts that the sweet-smelling exhalation of perfumes conduces no less to health than enjoyment, and if amongst the Egyptians they call myrrh 'bal' and this word signifies 'sweeping out of impurities', the name furnishes some evidence for Plutarch's explanation of the reason for which it is used.<sup>29</sup>

With the development of philosophic thought, especially after the Persian Empire, ideas regarding the uses of incense would seem to have been modified to make it applicable more especially to the spiritual side of the personality. Plutarch, for example, says of the Egyptian *kyphi* that it 'fans up the fire of the spirit connate with the body,' and Philoponus: 'as this gross body is cleansed with water, so is that spiritual body by purifications of vapors, for it is nourished with certain vapors and cleansed with others'.<sup>30</sup>

This aloe wood, calambac, sinking incense, or honey incense has been in very general use from India eastward. That it was ever anything but a rare exotic in Semitic or Mediterranean countries may be doubted, and that it was ever included in the Hebrew Scriptures among familiar native trees is, as Barton remarks, 'more than doubtful'. It was clearly known at about the Christian era, for the Book of Enoch, where the eastern journeys of Enoch are described, mentions a valley having fragrant trees such as the mastic, and east of them other valleys of fragrant cinnamon, still further eastward valleys of nectar and galbanum, and beyond these 'a mountain to the east of the ends of the earth whereon were aloe trees; and all the trees were full of *stacte*, being like almond trees, and when one burned it, it smelled sweeter than any fragrant odor'.<sup>31</sup>

<sup>29</sup> De Is. et Osir. 80. 2.

<sup>30</sup> In Aristotelis de Anima, 19. 24; cf. Mead, *The Subtle Body*, 67-68.

<sup>31</sup> I Enoch 28-31.

But classical writers are notably silent concerning aloe wood. For generation after generation in speaking of the wealth of the East they mention the silk of the Seres, the laurel and sometimes the pepper of India, and the spices of Arabia; but a rather thorough search discloses nothing further about aloe until Cosmas Indicopleustes, the Greek monk of the 6th century, who remarks in his *Christian Topography*<sup>32</sup> that Ceylon received from Tzinista—a combination of Burma and Yün-nan—silk, aloe, cloves and sandalwood.

At this point we may let the Arab writers take up the tale. Ya'kūbī, writing in the 9th century, distinguishes between the aloe of Kakula or Khmer and that of Champa, also an aloe of Kita', the best Chinese variety. He refers to another variety, *kašur*, as soft and ashen gray, which we may suspect to have been ambergris. The fifth voyage of Sindbad mentions the Isle of Khmer as producing the *Sanfi* or Champa aloe. Ibn Khordadhbeh, in the 9th century, refers to the Kingdom of Jāwaga (Sumatra) as producing aloes and the information is confirmed by Abū Zaid in the 10th century. The Island of Kalah, he says, which belongs to the King of Jāwaga, is the 'center of the commerce of aloes, camphor, sandalwood, ivory, tin, ebony, brazil wood, spices of all kinds, and other things too numerous to mention.' The Digest of Marvels, dating about 1000, gives similar information and extends the aloe trade to the rather fabulous country of Wak, which may have embraced the eastern islands from Japan to the Philippines. Edrīsī mentions several places in the Indo-Chinese peninsula as producing aloe. Yākūt, at the end of the 12th century, gives the curious piece of misinformation already referred to, in connection with Kūlam in South India, which he mentions as a center in trade of aloe, camphor, resins and barks. Aloe, he says, 'is brought northward by the sea. It is not drawn, yet it arrives at the shore. The aloe of Khmer begins to dry in its native land and continues to dry at sea. The king levies one-tenth of the aloe upon those who gather it at the beach'. This can hardly be other than floating ambergris (the product of disease or indigestion in whales), but there is

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<sup>32</sup> XI. 337.

no similarity in the two products, and no connection except that they were ingredients in the strong perfumes favored by the Muhammadans. This confusion of ambergris with aloe can certainly not have been due to appearance. As already stated, ambergris and musk, aloe and camphor, were all ingredients in the *nadd* of the caliphs that no longer contained nard. The confusion may have been due to that cause, or to a plain misreading of the Arabic, for *sbr*, aloes or myrrh, and *'nbr*, ambergris, are written so nearly alike that it might take a careful reader to distinguish between them.

Yākūt quotes a verse of an Arabian poet, Abū'l-Abbas aṣ-Ṣufri; 'It exhales a perfume as penetrating as musk rolled in the fingers, or as Kalahi aloe'. Ibn al-Baitār, writing in the 13th century, quotes the earlier description of Dioscorides and Galen referring to aloe as an incense, a perfume for the person or clothing, and in medicine as a remedy against fever and congestion. Avicenna enumerates several varieties, the best sorts being those which sink in water, and refers to the custom of burying the wood until it decays and nothing but the resin is left. Ibn Sa'īd, also of the 13th century, refers to the aloe of Jāwa, black, heavy and sinking in water as if it were a stone. Waṣṣāf, at the end of the 13th century, waxes poetic about the Island of Mūl Ṣawa, one of the conquests of Kublai Khan: 'The creative power of the Almighty', says he, 'has embalmed this place and its neighborhood in the perfume of the aloe and the clove. The very parroquets cry out in Arabic, "I am a garden, the glory and joy whereof are the envy of Paradise. For jealousy of my wealth the shores of Oman shed tears like pearls. The aloe of Khmer burns in my censers like wood on the fire."

Abu'l-Fidā tells of the mountains of Kamrun, a barrier between India and China, where aloes grow. Ibn Baṭūṭā, in the 14th century, tells of the gathering of the aloe in Indo-China and notes that in Muhammadan countries the trees are considered private property, but there they are wild and common. He made a visit to the king of Jāwa and was present at the wedding of the king's son, being dismissed thereafter with gifts of aloe, camphor, cloves and sandalwood. Ibn Iyas, in the 16th century, tells of the city of Kabul as exporting grapes, coconuts, aloe of delicate aroma and iron.

Abū'l-Fazl, at the end of the 16th century, speaks of 'ūd or aloe wood, 'called in India *agar*', as 'the root of a tree which is cut off and buried; that part which is worthless perishes; the remainder is pure aloes. The information of ancient writers to the effect that the tree grows in central India is absurd and fanciful'. All the varieties he mentions come from Indo-China or the Archipelago. The best, he says, 'is that which is black and heavy; put in water it lies at the bottom; it is not fibrous and it readily crumbles; the sort that floats is considered valueless; it centers freely into composition of perfumes. When one eats it one becomes joyous. It is generally used as incense, and in the form of powder its best qualities are used to rub into the skin and dust into the clothing'.

Sulaimān tells of the uses of aloe among the Chinese. When a man dies, says he, 'he is not interred until some subsequent anniversary of his death. The body is placed in a bier and kept in the house, lime being put on it for preservation, but in the case of a prince, aloe and camphor are used instead of lime. The dead are mourned three years. Those who do not mourn are beaten with rods, whether men or women, the people saying, "What, are you not afflicted by the death of your relatives?" Then the body is interred in a tomb as among the Arabs'.

The confusion in these substances is indicated in a passage in Jaubarī, a recipe for making myrobalan. First, he says, take a little true myrobalan, then one part each of gall-nut (terebinth?), myrrh and gum. Instead of myrrh other manuscripts at this passage have *sibar as-sukutri*, Socotrine aloes; but this word *sibar*, as already stated, refers indiscriminately to aloes and myrrh, and there is another word, *kāṭir* or *kūṭar*, which covers both aloes and dragon's blood. The modern Arabic version of the Psalms renders cassia as *salīḥ*, which is the word for myrobalan; which, in turn, means no more than an acorn, or fruit, used in ointments.

Why now the name *agar* or *agur* by which this Eastern resin is generally known in India? The Sanskrit lexicographers give *a+guru*, 'not heavy', and they give as a synonym, *īaghu*, 'light'. Professor Edgerton tells me that the latter word is not applied to aloe in the literature, and that while the form *a+guru* is unimpeachable, he will go so far as to say that

the derivation looks 'a little fishy'. While the incense is in constant use by the Parsees, Professor Jackson tells me that the word is quite certainly not Persian, and in conversation with a Zoroastrian priest, Jal Pavry, he finds that the incense is prepared by combining *agar* with *luban* (no doubt frankincense) and *bōi*—identification uncertain.<sup>33</sup> Sir Dinshah E. Wacha, a leading Parsee of Bombay, who is a member of the Indian Imperial Council, tells me that *agar* is burned with Zanzibar sandalwood and frankincense, both as incense and for purification of dwellings, and that it comes to Bombay from Arabia. While he may possibly be mistaken as to its origin, I incline to accept the statement, and to think that an *agar* usable as incense may have figured in early trade from Arabia, and may still figure, just as Arabian storax still reaches China in competition with the better quality that comes from Java. But the East Indian aloe or eagle-wood is not, and, so far as known, has never been a product of Arabia. What then may it have been? Cedar and juniper are possibilities. Henry Salt,<sup>34</sup> writing about a century ago, before modern transportation had revolutionized commerce, mentions among exports at Aden, coffee, myrrh, aloes, frankincense and mastic. Dioscorides mentions mastic or terebinth as exported from Central Arabia. But in South Arabia and Socotra the name aloe was applied also to the lily family. Chau Ju-Kua correctly describes the Socotrine aloe and transcribes it as *lui hwui*, which is pretty close to an Arabic *luwiy*.<sup>35</sup>

The derivation of a trade name like this can hardly be more than conjectural. There is a port Agar on the Arabian shore of the Persian Gulf at the upper end of the Bay of Bahrein. Until a century ago the same name was borne by an important trading city a few leagues inland now named Hofhuf. The classical geographers all mention a tribe named Agraei as dominating the Central Arabian caravan routes. In modern

<sup>33</sup> According to Dr. Laufer (*Sino-Iranica*, 462) this is a Baluchi name for bdellium, the resin of *Balsamodendron Mukul*. According to E. W. West (*Pahlavi Texts, S. B. E.* Vol. V) in Iranian literature 'whatever root, or gum, or wood is scented, they call a scent (*bod*)'.

<sup>34</sup> *Travels in Abyssinia*, 106.

<sup>35</sup> To the suggestion that *agar* may be a Dravidian word, it can only

Arabic this central region is still El Hejr. The name means merely 'stony', and was correctly Latinized as Arabia Petraea. The district between the valley of Hadramaut and the South Arabian coast is also known as El Hejr. On the Somali coast Drake-Brockman found *hagar* as a variety of incense gum.<sup>36</sup> Ibn Jami says about rhubarb that 'if one associates with it myrobalan of Kabul, aloes of Socotra and agaric, its action is thereby strengthened'. Agaric was a corky fungus growing on rotten wood, and no doubt would be a dependable emetic, and perhaps in sufficient quantity a positive poison. While Dioscorides would derive its name from a tribe of Agari in Sarmatia, it seems more likely that it goes back to the same root meaning 'to bend', that is, a bump, or excrescence. Finally there is the early Semitic root 'gr meaning 'to scratch', hence, to scrape up, gather, or collect; hence, from scraping together, to hire for wages, and by transfer to the person hired, a public courier or royal messenger. The writing which the messenger carried was in Persian *engareh*. The word passed into Greek as *angaros*, messenger, hence *angelos* or angel. While this could have had some bearing on the gathering of the resin by scratching the leaf or bark, I do not press the point.

'Perhaps 't is pretty to force together  
Thoughts so all unlike each other;

and this is unavoidable in dealing with ancient commerce. The Jewish Prayer Book, in its 'Blessings on Various Occasions', classifies the fragrant substances for which blessings are to be offered, as Fragrant Woods or Barks, Odorous Plants, Odorous Fruits, Fragrant Spices, and Fragrant Oils. Greater nicety of distinction may not have been expected of priest or people. In the aloe we seem certainly to have an ancient trade name that referred to disease, injury or decay in several trees or plants which appeared in the form of swellings or

be said that the synonyms in modern Dravidian languages, supplied by Watt, have no resemblance to such a form.

<sup>36</sup> Cf. *Bulletin of the Imperial Institute*, London 1914, Vol. XII, pp. 11—27. *Habbak hagar* is *Commiphora Hildebrandtii*, a near cousin of the myrrh.

growths, resulting in dark aromatic resins somewhat similar in appearance, bitter in taste and fragrant in the burning, conceived of originally as the dried blood of the in-dwelling divinity, and consequently as a means of purification. The definite limitation of the term in Biblical translations to a Far Eastern product unknown in Biblical times is an unfortunate anachronism for which the responsibility rests, not with the text itself, but with uncritical readers of the accounts of later exploration, too ready to identify new knowledge with ancient records.